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ABSTRACT

Evaluated was a New York City summer enrichment program for 357 educable, trainable, or brain damaged elementary and secondary school children. Objectives of the program were measured improvement in social and emotional development, cognitive development, hobby skill development, and physical fitness. Evaluation consisted of observation, interviews with teachers, and objective pretesting and posttesting. Each of the five centers (one in each borough) divided children into four classes by ability level. The program involved experiences with drama, jewelry making, physical education, and photography. The evaluation concluded that quality of staff services was high, that physical facilities and supplies were adequate to good, that the children enjoyed the program, and that significant gains were achieved in all program areas except physical fitness. It was recommended that the program be continued and extended, that more experiences in sports be provided, that a Spanish speaking teacher or aide be employed at each center, and that a more relevant test of motor skills be applied. Appended are class schedules and evaluation forms. (DB)

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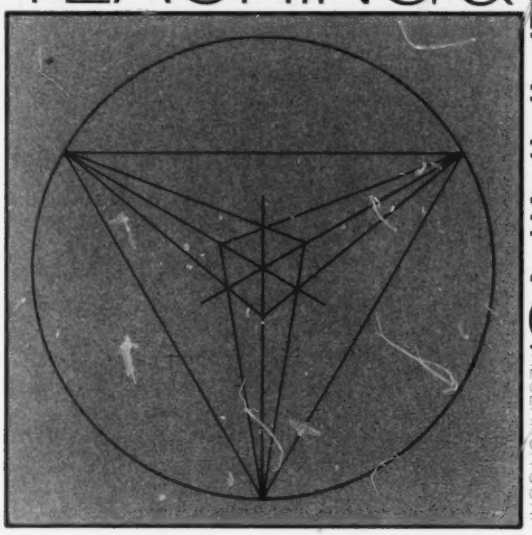

RESEARCH CORP

MENTALLY RETARDED TRAINABLE CHILDREN AND EDUCABLE PUPILS

SUMMER 1972

ESEA TITLE 1

Board of Education of the City of New York

FINAL REPORT

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FINAL REPORT

MENTALLY RETARDED TRAINABLE CHILDREN AND EDUCABLE PUPILS

Summer 1972 ESEA TITLE I

BOARD OF EDUCATION OF THE CITY OF NEW YORK

An evaluation of a New York City school district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed under contract with the Board of Education of the City of New York for the 1971-1972 school year.

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EXECUTIVE SUMMARY

The 1972 Summer Program for Mentally Retarded Trainable Children and Educable Children was designed to help the pupils develop social and recreational skills, specifically in the areas of jewelry making, photography, musical development and playing games. It was further anticipated that the children would gain improved self-concepts and increased confidence as the result of the selected activities. In order to provide for perceptual, affective and cognitive development, structured experiences were provided for observation, understanding and decision making.

Success of this program was judged by field observations and by pre-post tests responded to by the teacher-specialists both at the beginning and at the end of the program. Tests for social and emotional development, cognitive learning, jewelry making, photography, musical development and physical fitness will be found in Appendices C - H.

The program was designed for 300 pupils, ages 6 to 16. An additional 30 brain injured children were to be included in the Richmond Center. One school in each borough was designated as the center for that borough: P.S. 155 in Manhattan, P.S. 90 in Brooklyn, P.S. 70 in the Bronx, P.S. 111 in Queens and P.S. 16 in Richmond.

The total number of children enrolled was 357; the average daily attendance was 285. More children were enrolled than were provided for in the funding because many children spent two week periods at summer camps and the vacancies created were eagerly sought by other children and their parents. The total number of pupils enrolled included 241 educable, 84 trainable and 32 brain injured children. The grade placement of the pupils was 258 elementary, 53 intermediate and 46 junior high school.

The children were screened on the basis of personal data submitted by the regular school teachers, parent questionaires and initial interviews during the registration period. Children who had participated during previous years were invited to re-enroll. The total number of children who returned from previous programs was 16 or nearly 50% of the total enrollment. The percentage of returning pupils would have been higher except that 32 brain injured children were included for the first time and the Manhattan Center had been relocated making it less accessible for some children who had previously attended. If the Manhattan Center and the brain injured children are omitted, the percentage of returning pupils is about 60%.

Children in each center were divided into four classes. The first class included trainables and primary grade educable children. The second class consisted of younger educables and the third and fourth classes were made up of older and more able educable children. Brain damaged children in the Richmond Center were distributed among the classes on the basis of age and ability. One teacher was assigned to each class except in Richmond where two teachers shared each class. Volunteers in the program included parents and other community members, and student teachers, most of whom were graduate students working toward certification. Youth Corp workers who were CRMD high school students worked in the centers.

Classes were planned to begin July 5 but did not commence until July 7 because of a delay in funding. Classes ended August 17. All of the children in each center participated in jewelry making, photography, music and drama, and physical education classes. Field trips were taken by individual classes and by the center as a whole.

Evaluation of the program consisted of observations made in the centers, interviews with teachers-in-charge and teacher-specialists. Teachers-in-charge were asked to sum up the outstanding strengths of the program and to suggest ways in which the program could be of better service to the pupils. Objective testing procedures were:

A. Subjects - the entire population of the program was used.

B. Methods and Procedures - a teacher-rating schedule was completed for each program participant on a pre-post basis in the areas of jewelry making, photography, musical development, physical education, social and emotional, and cognitive development.

C. Method of Data Analysis - the rating sheets were summarized for central tendencies and frequency distribution. Statistical comparisons were made.

D. Time Schedule - rating sheets were completed at the beginning and the end of the program.

Data collected led to the following conclusions:

1. The program was implemented as proposed.
2. Quality of services of the staff was high. Morale was excellent.
3. Space and working conditions were good. Supplies were adequate although due to late funding some jewelry supplies were late in arriving.

4. Children's attitudes and behavior indicated that they were enjoying the program and profiting from the experiences.

5. Bus service was improved compared to previous years; however only the Richmond Center was able to service its entire borough.

6. Field trips were well organized and highly productive.

Recommendations:

1. The program should be continued and extended to make it available to children who live in other parts of the boroughs. This could be done preferably by establishing additional centers.

2. Provide more experiences in sports that can be enjoyed singly as well as in groups. This could include a more structured swimming program with an itinerant teacher to provide professional instruction. Roller skating could be added to the physical education classes.

3. Brooklyn and Staten Island were the only centers without a Spanish-speaking staff member. The Bronx and Queens had Spanish-speaking Youth Corps workers; Manhattan had a Spanish-speaking teacher. Due to contract requirements regarding teacher retention rights, it would not be feasible to be expected to hire a Spanish-speaking teacher for each center. An attempt should be made, however, to obtain the services of a Youth Corps member for those Centers.

4. If an attempt is going to be made to quantify the impact of the program on motor skills, a test which is more directly related to the kinds of activities used in the training program should be selected. A test such as the Lincoln-Oserestsky or Purdue Perceptual Motor Survey might be more relevant.

PROJECT DESCRIPTION

The 1972 Summer Program for Mentally Retarded Trainable Children and Educable Children was designed for 300 pupils, ages 6 to 16. An additional 30 brain injured children were included in the Richmond Center. One school in each borough was designated as the center for that borough; P.S. 155 in Manhattan, P.S. 90 in Brooklyn, P.S. 70 in the Bronx, P.S. 111 in Queens and P.S. 16 in Richmond.

TABLE 1

Number of Educable, Trainable and Brain Damaged Children in the Program

Center	Educable	Trainable	Brain Damaged	Total*	Average Daily Attendance
Manhattan	40	17		57	43
Brooklyn	32	16		48	39
Bronx	59	15		74	66
Queens	67	17		84	51
Richmond	43	19	32	94	86
Total	241	84	32	357	285

*Because of camp programs not all children attended at the same time.

TABLE 2

Number of Participating Children by Grade Level

Center	Elementary	Intermediate	Junior High
Manhattan	53	2	2
Brooklyn	44	0	4
Bronx	38	20	16
Queens	41	25	18
Richmond	82	6	6
Total	258	53	46

The children were screened on the basis of personal data submitted by the regular teachers, parent questionaires and initial interviews during the registration period. Children who had participated in the program during previous summers were invited to re-enroll.

TABLE 3

Number of Pupils Re-enrolled in the Project

Center	Educable Under 10	Trainable Under 10	Educable Over 10	Trainable Over 10	Total
Manhattan*			6		6
Brooklyn	5	3	14	8	30
Bronx	26	6	7	2	41
Queens	27	8	10	3	48
Richmond	8	2	31		41
Total	66	19	68	13	166

*Re-location of Manhattan Center made it less accessible for some children who had attended in previous years.

Children in each center were divided into four classes. The first class included trainable and primary grade educable mentally retarded children. The second class consisted of younger educables and the third and fourth classes were made up of the older and more able educables. Brain damaged children in the Richmond Center were distributed among the classes on the basis of age and ability. One teacher was assigned to each class except in Richmond where two teachers shared each class. Volunteers in the program included parents and other members of the community and graduate students, most of whom were working toward certification. Youth Corp workers who were CRMD high school students worked in the centers.

Classes were planned to begin July 5 but did not commence until July 7 because of a delay in funding. Classes ended August 17. All of the children in each center participated in jewelry making, photography, music and drama, and physical education classes. Field trips were taken by individual classes and by the center as a whole. Flexibility in planning permitted more field trips than are shown on the Master Programming System for All Centers (Appendix A) and the Daily Pupil Schedule for One Week (Appendix B).

Children were transported between home and school by bus. Each center had one or more buses assigned to it for this purpose and also for use in field trips. Lunches were served to all children in the program.

PROGRAM OBJECTIVES

The 1972 Summer Program for Mentally Retarded Trainable Children and Educable Children was designed to help the pupils develop social and recreational skills, specifically in the areas of jewelry making, photography, musical development and playing games. It was further anticipated that the children would show improved self-concepts and increased confidence as the result of the selected activities. In order to provide for perceptual, affective and cognitive development, structured experiences were provided for observation, understanding and decision making.

Success of the program in meeting these objectives was determined by these criteria.

A. It was anticipated that 60% of the pupils participating in the program would increase by at least one rating scale point in pre-post-test ratings by teachers in the area of social and emotional development (for those pupils who participated in at least 80% of the sessions).

B. It was anticipated that 75% of the pupils participating in the program would rate at least one rating scale higher in the area of cognitive development (for those children participating in at least 80% of the sessions).

C. It was anticipated that 75% of the pupils participating in the program would be rated at least one rating scale point higher on post-test when compared with pre-tests in the areas of jewelry making and/or photography and/or musical development, using the pre-post-test method (for those children participating in at least 80% of the sessions).

D. It was anticipated that 10% of the pupils participating in the program would show a five percentile increase on the American Association for Health, Physical Education, and Recreation - Kennedy Foundation Special Fitness Test for the Mentally Retarded (for those children participating in at least 80% of the sessions).

IMPLEMENTATION OF THE PROGRAM

Schools designated as borough centers were in good repair, clean and light. Classrooms selected were the coolest and most airy available. All schools had both indoor and outdoor play areas for the physical education programs. The centers took advantage of local swimming facilities.

All schools except the Brooklyn Center had a kitchen where lunches were prepared. Brooklyn Center lunches were prepared at a school about six blocks from the center. The original plan to have the children walk to this school proved impractical because the children were excessively tired by the long walk in the noon sun. Lunches, thereafter, were bagged and transported to the center. Lunches in the schools were served in all-purpose rooms that were also used for the indoor physical education classes. Lunch hours varied in some centers from those suggested in the master plan because of use of the all-purpose rooms by other programs in the school buildings.

This year two buses were provided for most of the schools, but to some extent participation in the program was still limited by bus transportation. Only the Richmond Center, with three buses, was able to serve its entire borough. Brooklyn with only one bus was generally limited to the Coney Island, Bensonhurst and Flatbush sections leaving children from the larger part of Brooklyn unable to participate. An attempt was made at each center to reduce travel time for the children. Bus routes were rearranged with the help of bus drivers who were described as highly cooperative. In some instances, central loading places were designated and while this reduced travel time significantly, it was not popular with parents and children and in some instances resulted in poorer attendance. The longest travel time was two hours each way for one child in the Richmond Center. Travel time was increased by road improvement activities. For the other centers, the maximum travel time was about one hour each way.

Late funding of the program resulted in a two day delay in the start of classes. This created communication problems and resulted in spotty attendance during the first week. It also created a delay in the arrival of some of the jewelry making equipment. The teacher-specialists in charge of this area of the program showed considerable ingenuity in designing projects with available materials, for example, name pins and jewelry boxes were constructed from colored toothpicks and alphabet macaroni.

Teachers-in-charge and teacher-specialists were experienced and well-prepared. The average number of years of experience was high. At least 75% of the teachers had served in the program in previous years.

Within the framework of a well-designed program that insured uniformity of broad experiences to the children of all boroughs, there was sufficient flexibility to permit the teachers-in-charge to take advantage of unique local facilities and talents. Local field trips for photography classes were planned to help the children learn about the neighborhood as well as develop photographic skills. Physical education classes took advantage of local swimming pools and other water play facilities such as park sprinklers and wading in the surf at Coney Island. In one school children were permitted to choose their afternoon classes to encourage them to complete longer projects or develop additional skills.

Supplies were adequate and in good condition. New equipment such as the copper enamel kilns added greatly to the program. Representatives of the manufacturer presented demonstrations in some schools.

EVALUATION PROCEDURES

Evaluation of the program consisted of observations made in the centers, interviews with staff, responses by teachers-in-charge to a request to sum up the outstanding strengths of the program and to recommend ways in which it could be of greater service to the pupils, and objective tests. Objective testing procedures were:

A. Subjects - the entire population of the program was used.

B. Methods and Procedures - a teacher-rating schedule was completed for each program participant on a pre-post basis in the areas of jewelry making, photography, musical development, physical education, social and emotional and cognitive development.

C. Method of Data Analysis - the rating sheets were summarized for central tendencies and frequency distribution. Statistical comparisons were made.

D. Time Schedule - rating sheets were completed at the beginning and the end of the program.

Appendix C is a sample of the rating sheet used to determine whether 60% of the pupils participating in the program did increases one point on the rating scale in the areas of social and emotional development. Appendix D is a sample of the rating sheet used to determine whether 75% of the students rated at least one rating scale point higher on post-tests as compared with their rating on pre-tests in the area of cognitive development. Appendices E, F and G are samples of the rating sheets used to determine whether 75% of the pupils participating in the program increased at least one rating point on the scale between pre-post-tests in the areas of jewelry making, photography and musical development. Appendix H provides the address where a copy of the AAHPER-Kennedy Foundation Special Fitness Test for the Mentally Retarded can be obtained. This is a copyrighted instrument which was used to determine whether 10% of the participating pupils shared a five percentile increase in performance.

RESULTS OF THE EVALUATION

A. Observations

The atmosphere in the classrooms was warm and friendly. The children freely asked for assistance from teachers and aides, greeted and showed accomplishments to the teachers-in-charge and initiated conversations with visitors. Although the span of interest for some of the children was short, the teachers provided sufficient diverse experiences within each class period so that the children were continuously involved in constructive activities.

Although the centers reported a significant percentage of bi-lingual pupils, few of the teachers in the program spoke Spanish. In some instances, an aide was bi-lingual. In other centers, an employee from one of the other programs in the building helped out during parent conferences and translated notices to be sent home to Spanish-speaking parents.

The copper enamel kiln projects insured successful experiences in jewelry making for all children. The copper blanks and enamel powders were such that a wearable item resulted from each firing and parents were pleased to receive this attractive jewelry from their children. Other projects such as making wall plaques, vases and flowers were also successful.

The music and drama classes were very well received by the children. They responded happily to the rhythms and enjoyed the social dancing experiences. Teachers took advantage of the children's enthusiasm to incorporate counting and body parts identification songs and rhymes. As part of the drama experiences, the children gained confidence in their ability to speak in group situations. In addition, these opportunities for increased verbalization resulted in significant improvement in the speech of trainable and brain injured children.

Physical education classes were held in the all-purpose rooms during inclement weather. Activities included games and the use of equipment to develop the skills needed for participation in popular sports. Some of the activities and games also involved identification of body parts and counting. Outdoor classes included additonal activities to develop skills and the use of these skills in playing such organized games as softball.

Community swimming facilities were used to advantage in the program. Many children exhibited fear of the water and required considerable encouragement from their teachers before they were willing to enter the pools. In some centers, physical education teacher-specialists with the necessary training taught beginning swimming to the pupils. In other centers, the non-swimmers were simply allowed to splash around and

overcome their fear of the water. Some centers were able to arrange exclusive use of the public facilities for definite periods. In other centers, the pupils joined other children using the pool.

Children in the photography classes had an opportunity to develop a skill that is very much a part of the contemporary scene. The finished photographs were generally good and in some cases exceptional. They showed that the children had acquired an understanding of the choice of subject matter, background and framing. Good field trips provided interesting subject matter. Some pictures of tigers and other zoo animals were unusually good. The children's progress and enthusiasm were indicative of the importance of having a professional teacher-photographer available to all groups on a regular basis.

Field trips were among the most popular and worthwhile activities. Some trips were designed to explore the city -- the airport, museums, parks, police and fire academies, ethnic areas (example - Chinatown), United Nations, ferry rides, zoos, aquarium and botanical gardens; other field trips were local-cookouts, nature walks and visiting local parks. These trips contributed greatly to the social and cognitive development of the children and to their self-concept as knowledgeable citizens of an exciting and diverse city.

Although there were other programs in each of the schools, contacts with the members of these programs was limited. This resulted in part from the full and satisfying program offered the children in this program. Some centers tried having children from the Mentally Retarded Summer Program attend assemblies of other groups. This was somewhat successful but generally the students from the M.R. program were anxious to get on with their own work rather than be spectators at the productions of other children. In some cases, other programs were so large that the children from the M.R. program would have been overwhelmed in any attempted contacts. In at least one center, summer play group children, who were not served lunches, resented the lunch program of the M.R. children and it was necessary for the teacher-in-charge or an aide to help the cafeteria worker protect the food from pilfering. Some schools allowed siblings who were not eligible for this program to join the group for a day or two. These contacts were very successful since the program was considered exciting and desirable by these visitors.

All centers kept in contact with parents by the use of many flyers. Additional contact was established in different ways - workshop-social hours, parent participation in field trips, as well as concluding exercises and exhibits. All centers encouraged the parents to use the school as a resource center when problems arose.

Although not funded by this program, some centers had the use of speech and guidance teachers. In the unrushed summer days, these workers were able to be especially effective in working with the children and to begin relationships that will be continued during the regular school year. Although no psychologists were available, this program might also be used to advantage in the testing program if such help were available.

The mixture of brain injured and retarded in the same classes in the Richmond Center created certain special problems during the initial period. The difficulties were mainly in the area of behavior management and some consideration was given to dividing the groups. After discussion, the decision was made to continue the heterogeneous grouping for a somewhat longer period before abandoning it as unworkable. This decision proved to be wise and the classes soon settled down into viable groups. Two teachers were assigned to each class. Some teachers, because of personal preference, would have liked smaller classes with one teacher in each; however, even these teachers agreed that the larger classes with two teachers worked well.

As the program continued, there was agreement among the staff that both groups benefited from the contacts with each other. The brain injured children were seen as particular beneficiaries in that it helped them develop a better sense of identity and a greater appreciation of their own abilities. In some instances, more advanced material could be introduced because of the presence of the brain injured children while at the same time, the retarded children offered increased stability to the group.

Interviews with and questionaires directed to the teachers-in-charge found unanimous agreement about the importance of the program to the pupils.

1. The children were afforded an opportunity to continue their learnings rather than sit at home isolated from others.

2. The children developed improved self-concepts as a result of learning a variety of new skills and understandings.

3. The children experienced new successes in social relationships which will enable them to participate more effectively in various interpersonal activities when they return to school.

4. The children became acquainted with many of the diverse offerings of their city and so their horizons were greatly extended.

The teachers-in-charge saw the following as contributing to the success of the program: 1) the experience of the staff and their willingness to extend themselves for the children beyond the requirements of the job situation; 2) the flexibility of the program that permitted them to take advantage of individual differences among the staff; and 3) unusual opportunities that were local in nature.

It was generally agreed that the program could be of even greater service to the pupils in the following ways:

1. Extend the program so that more children could participate in this summer experience. This could be done by opening more centers or providing more buses. It was suggested that mini-buses might be used to advantage in areas with heavy traffic.

2. A dry run by buses before school begins could be used to acquaint parents with their responsibilities as well as routes and times so that there would be a minimum of confusion and absenteeism during the first week.

3. Earlier funding would result in better planning and more extensive publicity, and increased enrollment.

Other staff recommendations included:

1. A more structured swimming program was suggested. Such a program could be staffed by an itinerant teacher similar to the one used in the photography program.

2. Teaching more sports that could be enjoyed alone as well as in groups. Roller skating was specifically suggested.

3. Add ceramics to the jewelry program.

4. More contact with the regular school teachers. This could take the form of level of functioning reports from the teachers and progress reports back to them.

5. Provision for one or more "longer" days so that field trips to more distant places could be taken.

B. Quantitative Data

It was anticipated that 60% of the pupils participating in the program (at least in 80% of the sessions) would increase by at least one rating scale point in pre-post test ratings in the area of social and emotional development.

The following tables (Tables 4 & 5) indicate that significant gains were made by students in this program. It can be seen in Table 4 that gains made by the students was statistically significant. Improvement in this area is important since this area appraised those skills needed in social and emotional development.

Table 4

Tests of Significance of Gains

Social-Emotional

(N=237)

	$\overline{X}$	S.D.	t	df
Pre-Test	52.16	8.57	5.89*	236
Post-Test	59.63	8.15		

*Alpha = .01 1 tailed correlated "t"

Table 5

Percentage of Change Social Emotional Development

(N=237)

Increase	No Change	Decrease
83	6	11

The anticipated outcome was substantiated by the data contained in Table 5. More than 60% of the students made the expected gain.

Table 6

Tests of Significance of Gains

Cognitive Development

(N=237)

	$\bar{X}$	S.D.	t	df
Pre-Test	54.46	8.23	2.68*	236
Post-Test	59.00	8.94		

*Alpha = .05 1 tailed correlated "t"

The preceeding table indicates that the gains in ratings of Cognitive development were statistically significant. It was anticipated that 75% of the pupils participating in the program would rate at least one rating scale higher in the area of cognitive development. This was not substantiated by the data which showed 56% of the students attending 80% of the sessions made at least a one point gain in this area (Table 7).

Table 7

Percentage of Change Cognitive Development

(N=237)

Increase	No Change	Decrease
56	14	30

Table 8

Tests of Significance of Gains
Musical Skills

(N=158)

	$\bar{X}$	S.D.	t	df
Pre-Test	20.94	5.62	4.91*	157
Post-Test	23.23	4.39		

*Alpha = .01 1 tailed correlated "t"

Musical skills were improved significantly among the students who attended the program. Progress was reported at the .01 level of confidence for students in all of the schools.

It had been anticipated that 75% of the pupils participating in the program would be rated at least one rating scale higher in either jewelry making, photographic skills or Musical skills. In "Musical Skills," this criterion was not reached (see Table 9).

Table 9

Percentage of Change in Musical Skills
(N=158)

Increase	No Change	Decrease
53	16	31

Photographic skills was another one of three areas where anticipated gains of one scale point on the part of 75% of the students who attended 80% of the sessions was predicted. The t test results appear in Table 10. The data in the table indicate statistically significant gains.

Table 10

Tests of Significance of Gains

Photography
(N=228)

	$\bar{X}$	S.D.	t	df
Pre-Test	15.04	9.94	19.10*	227
Post-Test	24.79	9.69		

*Alpha = .01 1 tailed correlated "t"

Table 11

Percentage of Change in Photography
(N=228)

Increase	No Change	Decrease
85	5	10

The data in Table 11 shows that the criterion specified in the evaluation design was satisfied since 85% of the students in the program made the anticipated one scale point.

Table 12

Tests of Significance of Gains

Jewelry Making
(N=247)

	$\bar{X}$	S.D.	t	df
Pre-Test	7.30	3.94	8.29*	246
Post-Test	10.45	6.21		

*Alpha = .01 1 tailed correlated "t"

From the preceeding Table one can note that the skills required for jewelry making were improved significantly during attendance in the program. The improvement was at the .01 level of significance.

Again the criterion was for 75% of the students in this program to gain one scale point in this skill. The actual outcome for students in this skill was 67% as can be seen in Table 13.

Table 13

Percentage of Change Jewelry Making
(N=247)

Increase	No Change	Decrease
67	18	15

A fourth major area of concern was the development of improved physical fitness. An increase of five percentile ranks for at least 10% of the consistently attending participants served as criterion. Discrepancies in N across sub-tests is a result of the fact that the test was not always administered in a single session and in some instances a sub-test was deemed inappropriate or too stress producing to be used with a particular group. The analysis summarized in Table 14 shows that on two of six sub-tests the criterion was attained (flexed arm hang and broad jump).

Table 14

Percentages of Students with Five Percentile Increase in Physical Development

	N	Increase + 5 Percentile	Increase less than 5 Percentile
Flexed Arm Hang	61	21	79
Set-ups	146	8	92
Shuttle Run	64	5	95
Broad Jump	145	11	89
50 Yd. Dash	139	4	96
300 Yd. Run Walk	136	7	93

Table 15 shows a significant decrease in mean flexed arm hang and no significant change in the 50 yard dash, shuttle run and the 300 yard run walk. There was a significant increase in sit ups and broad jump.

Table 15

Tests of Significance of gains in Physical Development

	Pre-Test			Post-Test				
	N	$\overline{X}$	S.D.	N	$\overline{X}$	S.D.	t	df
Flexed Arm hangs	20	35.800	11.344	20	20.350	15.469	3.472**	19
Sit-ups #	146	10.04	8.68	146	14.29	10.32	8.56**	145
Shuttle Run	64	12.62	3.01	64	12.26	2.02	1.41	63
Broad Jump	145	17.59	35.58	145	43.97	16.29	8.12**	144
50 Yd. Dash	139	10.20	2.10	139	9.94	1.90	1.40	138
300 Yd. Run Walk	36	79.444	10.321	36	78.666	8.717	1.057	34

*Alpha = .05
**Alpha = .01

Summary and Recommendations

The 1972 Summer Program for the Mentally Retarded Trainable Children and Educable Children was a well-planned and well-coordinated project. The teachers-in-charge had good relationships with their staffs and morale was high. Teacher-specialists, aides, volunteers, Youth Corp and clerical workers, all reflected the positive tone set by the administration. Even with the exceptionally hot and humid weather that marked the beginning of the program, there was no let down in performance. The experienced teacher-specialists were warm, friendly and displayed a willingness to go beyond the requirements of the job in order to help the children. Staff members particularly appreciated the flexibility that permitted them to take advantage of special situations and their own particular talents.

The special areas, jewelry making, photography, music and drama, and physical education, were appropriate to the children in the program. They provided built-in successes while imparting skills that are respected by contemporary society. The field trips were well-planned and contributed to the children's knowledge of the acquired many social and cognitive skills that they need in order to move more freely in their world.

The extent to which both teachers and students have found participating in these programs rewarding in previous years is demonstrated by the fact that more than 75% of the teachers had previously served in the program and nearly half of the children were returnees. The percentage of returning pupils would have been higher except that 32 brain injured children were admitted to the program for the first time and the Manhattan Center was relocated making it less accessible for some children who had previously attended. If the Manhattan Center pupils and the brain injured children are omitted, the percentage of returning pupils is about 60%.

Daily attendance at the schools was good. Many children were absent for two week periods because of summer camp programs. In most instances, their places were taken by children who were on waiting lists or who had recently returned from camp.

Recommendations

1. Enlarge the program so it is available to children who live in other parts of the boroughs. This could be done by establishing additional centers.

2. Provide more experiences in sports that can be enjoyed singly as well as in groups. This could include a more structured swimming program with an itinerant teacher to provide professional instruction. Roller skating could be added to the physical educational program.

3. Brooklyn and Staten Island were the only centers without a Spanish-speaking staff member. The Bronx and Queens had Spanish-speaking Youth Corps workers; Manhattan had a Spanish-speaking teacher. Due to contract requirements regarding teacher retention rights, it would not be feasible to be expected to hire a Spanish-speaking teacher for each center. An attempt should be made, however, to obtain the services of a Youth Corps member for those Centers.

4. If an attempt is going to be made to quantify the impact of the program on motor skills, a test which is more directly related to the kinds of activities used in the training program should be selected. A test such as the Lincoln-Oserestsky or Purdue Perceptual Motor Survey might be more relevant.

APPENDIX A

MASTER PROGRAMMING SYSTEM
for all centers

Monday			Physical Ed	Jewelry Making	Drama	Photography & Trips
9:10 - 10:30	Period	I	Group A	B	C	
10:40 - 12:00	"	II	B	C	A	D
12:10 - 1:00	"	III	Lunch (ALL GROUPS IN CENTER)			
1:00 - 1:55	"	IV	C	A		(Advanced Group)
Tuesday	Period	I	Group A	B	D	
		II	B	D	A	
		III	Lunch	Lunch	Lunch	C
		IV	D	A	B	
Wednesday	Period	I	Group A	C	D	
		II	C	D	A	B
		III	Lunch	Lunch	Lunch	
		IV	D	A	C	
Thursday	Period	I	Group B	C	D	
		II	C	D	B	A
		III	Lunch	Lunch	Lunch	
		IV	D	B	C	
Friday	Period	I	Group A	B	C	
		II	B	C	A	
		III		Lunch	Lunch	D
		IV		A	B	(Advanced (Group (Repeat

APPENDIX B

DAILY PUPIL SCHEDULE
for one week

III. GROUP A

	PERIOD	ACTIVITY	ROOM	TEACHER
Monday	1st Period	Physical Ed.		
	2nd "	Drama		
	3rd "	Lunch - (Supervision by all 4 teachers every day)		
	4th "	Jewelry Making		
Tuesday	1st Period	Physical Ed.		
	2nd "	Drama		
	3rd "	Lunch		
	4th "	Jewelry Making		
Wednesday	1st Period	Physical Ed.		
	2nd "	Drama		
	3rd "	Lunch		
	4th "	Jewelry Making		
Thursday	1st Period			
	2nd "			
	3rd "	Photography-out on trip		
	4th "			
Friday	1st Period	Physical Ed.		
	2nd "	Drama		
	3rd "	Lunch		
	4th "	Jewelry Making		

IV. GROUP B

	PERIOD	ACTIVITY	ROOM	TEACHER
Monday	1st Period	Jewelry Making		
	2nd "	Physical Ed.		
	3rd "	Lunch		
	4th "	Drama		
Tuesday	1st Period	Jewelry Making		
	2nd "	Physical Ed.		
	3rd "	Lunch		
	4th "	Drama		
Wednesday	1st Period			
	2nd "			
	3rd "	Photography-out on trip		
	4th "			
Thursday	1st Period	Physical Ed.		
	2nd "	Drama		
	3rd "	Lunch		
	4th "	Jewelry Making		
Friday	1st Period	Jewelry Making		
	2nd "	Physical Ed.		
	3rd "	Lunch		
	4th "	Drama		

APPENDIX B (continued)

V. GROUP C

	PERIOD	ACTIVITY	ROOM	TEACHER
Monday	1st Period	Drama		
	2nd "	Jewelry Making		
	3rd "	Lunch		
	4th "	Physical Ed.		
Tuesday	1st Period			
	2nd "			
	3rd "	Photography-out on trip		
	4th "			
Wednesday	1st Period	Jewelry Making		
	2nd "	Physical Ed.		
	3rd "	Lunch		
	4th "	Drama		
Thursday	1st Period	Jewelry Making		
	2nd "	Physical Ed.		
	3rd "	Lunch		
	4th "	Drama		
Friday	1st Period	Drama		
	2nd "	Jewelry Making		
	3rd "	Lunch		
	4th "	Physical Ed.		

APPENDIX C

"Summer Program for Mentally Retarded Trainable Children and Educable Pupils"

Teacher Questionnaire for Social-Emotional Development

Date _____ Name of Teacher _____

Name of Pupil _____

Instructions: Please indicate the level of development of each pupil in your class. Answer all questions by checking the appropriate categories.

Social-Emotional Development

	Always	Frequently	Seldom	Never
A. Task Orientation				
1. Initiates activities	____	_____	____	____
2. Accepts class assignments	____	_____	____	____
3. Assumes responsibility for carrying out assignments	____	_____	____	____
4. Does assignments with enthusiasm	____	_____	____	____
B. Social Relationships				
1. Works well with peers.	____	_____	____	____
2. Plays well with peers	____	_____	____	____
3. Accepted and liked by the group	____	_____	____	____
4. Sensitive to feelings of others	____	_____	____	____
5. Exhibits good manners	____	_____	____	____
6. Responds well - praise and approval	____	_____	____	____
7. Shows a sense of humor	____	_____	____	____
C. Emotional Development				
1. Shows appropriate emotional responses	____	_____	____	____
2. Accepts authority	____	_____	____	____
3. Freedom from neuroticism (ticks, incontinence, etc.)	____	_____	____	____
4. Controls disruptive emotions	____	_____	____	____

APPENDIX C (continued)

D. Pupil Frustration - Tolerance	Always	Frequently	Seldom	Never
1. Tolerates distractions	____	____	____	____
2. Completes tasks	____	____	____	____
3. Avoids fights	____	____	____	____
4. Plans ahead	____	____	____	____
5. Delays immediate pleasure for later rewards.	____	____	____	____

APPENDIX D

Teacher Questionnaire for Pupil Cognitive Development

	Always	Frequently	Seldom	Never
A. Follow Direction				
1. Points to parts of body when directed	____	____	____	____
2. Points to concrete objects when asked (desk, chair, etc.)	____	____	____	____
3. Follows relatively difficult directions	____	____	____	____
B. Cognitive Development				
1. Identifies common actions	____	____	____	____
2. Can tell all colors apart consistently	____	____	____	____
3. Counts objects to ten	____	____	____	____
4. Counts objects above ten	____	____	____	____
5. Knows up from down, top from bottom	____	____	____	____
6. Knows right from left	____	____	____	____
7. Knows opposites (big, little)	____	____	____	____
Communication Skills				
C. Verbal Ability				
1. Uses single word sentences	____	____	____	____
2. Uses verb-object sentences (give me)	____	____	____	____
3. Uses noun-verb sentences (I like)	____	____	____	____
4. Uses noun-verb object sentences (I like you)	____	____	____	____
D. Encoding Ability				
1. Asks simple questions	____	____	____	____
2. Asks personal questions	____	____	____	____
3. Asks information questions	____	____	____	____
4. Takes part in group discussion	____	____	____	____
5. Initiates conversation	____	____	____	____

APPENDIX E

"Summer Program for Mentally Retarded Trainable Children and Educable Pupils"
Teacher Questionnaire for Pupil Development in Jewelry Making

Instructions: Please indicate the level of development of each pupil in your class. Answer all questions by checking the appropriate categories.

	Excellent	Good	Fair	Poor
A. Knowledge and Use of Tools Manifests ability to:				
1. Recognize tools by name	_____	____	____	____
2. Use Tools	_____	____	____	____
3. Use proper tools for a particular operation	_____	____	____	____
4. Take proper care of tools and equipment	_____	____	____	____
5. Work neatly	_____	____	____	____
6. Exercise care in performing tasks	_____	____	____	____

APPENDIX F

"Summer Program for Mentally Retarded Trainable Children and Educable Pupils"

Teacher Questionnaire for Pupil Development in Photographic Skills

Instructions: Please indicate the level of development of each pupil in your class. Answer all questions by checking the appropriate categories.

A. Mechanical Skills Manifests ability to:	Excellent	Good	Fair	Poor
1. Hold camera steady at eye level and look into view finder	____	____	____	____
2. Utilize light meter	____	____	____	____
3. Frame image of selected topic	____	____	____	____
4. Hold camera steady while snapping picture	____	____	____	____
5. Remove cover sheet properly	____	____	____	____
6. Count 15 seconds for proper exposure	____	____	____	____
7. Pull finished product from camera correctly	____	____	____	____
8. Remove cover sheet from exposed print	____	____	____	____
9. Apply fixing compound on print correctly	____	____	____	____
10. Load camera	____	____	____	____
B. Creativity Manifests ability to:				
1. Produce a print of good composition	____	____	____	____
2. Exercise originality in selection of topics photographed	____	____	____	____
3. Crop pictures	____	____	____	____
4. Select interesting topics	____	____	____	____

APPENDIX G

Rating Scale - Musical Development

1	2	3	4	5	6	7
*Name	Listening to music	Matching Rhythms	Singing	Dramatic Reaction to Music	Dancing	Body Rhythm in Response to music
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

*Give first name and first letter of last name only

APPENDIX H

Copies of AAHPER-KENNEDY FOUNDATION SPECIAL FITNESS TEST FOR THE MENTALLY RETARDED can be obtained from:

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